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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,714	03/31/2004	Heinz H. Busta	100067	9863
29050	7590 01/27/2006		EXAM	INER
STEVEN W	ESEMAN	DICKEY, THOMAS L		
ASSOCIATE	GENERAL COUNSEL, I.	P.		
CABOT MICROELECTRONICS CORPORATION			ART UNIT	PAPER NUMBER
870 NORTH COMMONS DRIVE			2826	
AURORA, II	60504			_

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

•	Application No.	Applicant(s)				
	10/814,714	BUSTA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Thomas L. Dickey	2826				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.11 after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from to cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on 18 Ju	une 2004.					
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-35</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-35</u> are subject to restriction and/or e	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) acce		Examiner.				
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. & 119(a)	u-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:	priemy ariaer ee e.e.e. 3 1 (e(a)	(0) 5. (1).				
1. Certified copies of the priority documents	s have been received.					
2. Certified copies of the priority documents		on No				
3. Copies of the certified copies of the prior						
application from the International Bureau	ı (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal Pa	atent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:					

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DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-28, drawn to a composition (and method of making said composition), classified in class 252, subclass 500.
 - II. Claims 29-34, drawn to an X-ray source, classified in class 378, subclass 119+.
 - III. Claim 35, drawn to a cathode ray tube, classified in class 313, subclass 364+.

The inventions are distinct, each from the other because of the following reasons:

A. Inventions I and III are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention I has separate utility such as a colorant for a toner for development of electrostatic images. Invention II has separate utility such as a photocathode. See MPEP § 806.05(d).

B. Inventions II and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the

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particulars of the subcombination as claimed because the requirement, of a conductive layer provided along an upper support structure, such that when said conductive layer is struck by impinging high-energy electrons said upper support structure <u>converts</u> said high-energy electrons into x-rays, appears to be novel and non-obvious. The subcombination has separate utility such as a colorant for a toner for development of electrostatic images.

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- C. Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the requirement, of a conductive layer provided along an upper support structure, such that when said conductive layer is struck by impinging high-energy electrons said upper support structure converts said high-energy electrons into x-rays, appears to be novel and non-obvious. The subcombination has separate utility such as a photocathode.
- 2. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement is traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas L Dickey whose telephone number is 571-272-1913. The examiner can normally be reached on Monday-Thursday 8-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

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have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

> Thomas L. Dickey Patent Examiner Art Unit 2826

01/06